Solar Business Council Inc.

Submission to the

Renewable Energy Target Review

September 2012

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Introduction

The Solar Business Council Inc. (SBC) appreciates the consultation process being undertaken by the Climate Change Authority and looks forward to actively participating in the discussion and the review process over coming months.

The SBC makes this submission having considered their extensive experience in solar research and development; commercialisation; working with Government programs; project execution and funding.

While the SBC recognises that the RET REVIEW needs to address the spectrum of renewable energy technologies, this submission focuses on the areas where we have direct and relevant experience.

Executive Overview

Energy and emissions policies are dependent on private sector behaviour to achieve Government objectives. Governments establish rules and regulations and the private sector responds by maxmising their performance within these rules. As a result, policies must include devices that overcome the different drivers and perspectives of Government (which tend to be longer term, more strategic) and the private sector that is must operate with a more tactical approach.

Given investment in new generation is driven by Business, Government needs to set the rules such that Business invests in what the Government believes is in our long-term interest. The RET provides a mechanism to encourage Business to make investment decisions (e.g. in Wind or solar) which are consistent with what is in Australia's long term interests (i.e. consistent with a Government investment case).

It should be noted that the costs of the RET have not been accurately reflected in public discussion in that:

- Deeming of STCs has the effect of bringing the cost of abatement forward to day one of system life
- Over sized State based Feed in Tariffs are no longer in place and will not add to the future costs of the RET
- The reduction in multipliers on STCs have nearly run their course and will have little impact on the future cost of the RET
- The cost impact to the market/economy of STCs has been increased by electricity retailers "passing on" the cost of STCs at $40 instead of the real cost which has been closer to half that.
- The discussion has focused on the costs and not included the benefits – i.e. it has not been about net costs

In summary, the SBC submits that:

- Current and planned activity can achieve the current RET and material changes are unnecessary to achieve this target and unwise.
- Maintaining investor confidence in the sector is critical to ensuring we can meet Australia's long-term energy, environmental and economic needs.
- Confidence will be eroded if there is a reduction to the 41,000 GWh LRET or the structure of the SRET.
- The cost of SRES has peaked and is rapidly declining. The benefits it provides continue to increase. The SRES is now the best value contributor towards meeting the RET.
- The SRES creates enormous community awareness and engagement – and rewards those that take action that supports the RET. Changing the SRES will disenfranchise literally millions of ordinary Australian citizens (more than 2 million already live under a roof that reduces emissions and contributes to the RET) in favour of major corporations that already dominate our energy markets.
- A strategic review should consider what will need to be done post 2020, after we achieve the 2020 target. Specifically, "are we effectively positioning the economy and the energy sector to meet the next phase of the transition into a carbon constrained economy?" This review could form part of the current review of the RET, or it could take place outside of, and immediately after, the current legislated RET review.
- A strategic review should include work to establish the economic benefits (i.e. the return on investment) for the electricity market and the economy and take these into consideration when evaluating the impact of the RET and considering post 2020 scenarios.
- The Commission should encourage an all-of-Governments approach to removing the market, legislative and structural barriers to evolving the energy sector into one that represents a 21st century technology, emissions and demand scenario.
- The Commission should encourage an all-of-Governments approach to ensure that costs associated with the RET that were and are expected to be "passed through" will be passed through without windfall profits to those processing the pass through.

Answers to Specific Questions

Large-scale Renewable Energy Target

The 20 per cent by 2020 commitment

Q: Are the existing 41,000 GWh LRET 2020 target and the interim annual targets appropriate? What are the implications of changing the target in terms of economic efficiency, environmental effectiveness and equity?

A: The existing targets are sufficient to achieve the objectives of the RET and industry and the community have aligned their behaviour and investments in ways that will support achieving the target.

Reducing the target 41,000GWh LRET target will have a number of implications:

1. It will mean that investments made based on detailed forecasting of the value of LRECs are likely to under achieve – as a result of direct Government intervention rather than market outcomes.
2. Investors, whose support needed for all forms of energy and infrastructure will have less appetite for the Australian energy sector, increasing the cost of finance and reduce Australia's ability to finance new infrastructure.
3. Australia's inevitable investment in renewable energy will be further delayed. Australian and international research has demonstrated that delays in the transition to low/no emissions power generation will significantly increase the costs to the economy as a whole.
4. The Australian market for renewable energy is significantly constrained by the difficulty of contracting long-term power purchase agreements at economically viable (for the producer) prices. Any downward movement of the target from 41,000 GWH would further exacerbate this issue.

Increasing the target should be considered if analysis shows that longer-term (post 2020) targets will not be achieved without increasing the deployment trajectory. If a decision to increase the target is made, it should be done in a strategic way that produces a long-term change in investment behaviour that can be relied on for making long-term investment decisions.

Q: Is the target trajectory driving sufficient investment in renewable energy capacity to meet the 2020 target? How much capacity is needed to meet the target? How much is currently committed? Has the LRET driven investment in skills that will assist Australia in the future?

A: Modelling completed by a number of independent organisations (such as ROAM Consulting) shows that deployment is on track to meet the target, assuming changes are not made to the target (up or down). What has not been achieved is a viable mix of renewable generation with the vast majority of LRECs being produced by wind. Other technologies such as solar can and will play a larger role between now and 2020, provided the target is not reduced.

If the target is reduced from 41,000 GWh, we would see a situation where almost all of our renewable generation is wind based. This would skew the generation profile of renewables away from peak times, reduce the benefit of reduced wholesale prices for

electricity and leave Australia without large-scale solar capability that is be crucial in meeting further targets.

Q: In the context of other climate and renewable policies, is there a case for the target to continue to rise after 2020?

A: While logic suggests that the target should increase post 2020 in order to meet objectives through to 2050, the setting of new targets should be the subject of separate detailed analysis and coordination with firm objectives for post 2020 outcomes. Such work should be done subsequent to, and informed by, the RET Review.

Q: Should the target be a fixed gigawatt hour target, for the reasons outlined by the Tambling Review, with the percentage being an outcome?

A: The fixed GWh target is required for 2 key reasons:

1. Only a fixed GWh target informs the market in a way that will encourage investment in long term assets.
2. There are a number of elements in the approach to reducing emissions, including more efficient use of electricity and distributed and embedded generation. Using a moving GWh target that is calculated as a percentage of demand has the impact of penalising outcomes from energy efficiency and distributed and embedded generation.

Q: Should the target be revised to reflect changes in energy forecasts? If so, how can this best be achieved – as a change in the fixed gigawatt hour target, or the creation of a moving target that automatically adjusts to annual energy forecasts? How should changes in pre-existing renewable generation be taken into account? What are the implications in terms of economic efficiency, environmental effectiveness and equity?

A: Changes should only be made outside the period of the current RET – that is, change what happens next rather than what we have committed to. Doing otherwise risks seriously damaging Australia's ability to generate the investment required to meet our future energy and environmental needs and should only be done in a way that ensures a smooth transition from the current generation/emissions profile to the required future state.

Clean Energy Finance Corporation–funded projects

Q: What are the costs and benefits of increasing, or not increasing, the LRET target for Clean Energy Finance Corporation-funded activities? What are the implications in terms of economic efficiency, environmental effectiveness and equity?

A: As the impact of the operation of the CEFC on deployment of large scale renewable energy is yet to be established, the target should not be altered to allow for this impact, at this time. The CEFC may result in increased deployment in the near term, it may result in a broader portfolio of generation technologies or perhaps both these things.

In principle, altering the target should only be done if there is a real, known and material risk of Australia failing to meet its emissions reduction objectives. More data is required before such a decision could be made.

The large-scale eligibility framework

Q: Is a list approach to 'eligible renewable sources' appropriate?

A: A list is the only practical approach to take. Adding to the list without increasing the target in effect reduces the available target for technologies already on the list and will have a similar impact to reducing the 41,000 GWh target itself. For this reason, if a decision is made to provide incentives for technologies not currently on the list, this should be done outside the current target – and included in a new post 2020 target.

LRET administration

Q: Are the LRET accreditation and registration procedures appropriate and working efficiently?

A: Our experience with accreditation and related processes has been that they adequately meet the needs of both business and Government.

Small-scale Renewable Energy Scheme

Q: What do you consider to be the costs and benefits of having a separate scheme for small-scale technologies?

A: Quantifying the cost is equally as hard as quantifying the benefit. When looking at the costs, it is clear that:

- The impact of combining deeming and multipliers has disconnected costs from benefits. The original 5 times multiplier combined with deeming effectively placed a 75 year abatement cost on day one of a small system installation which has distorted the analysis of the costs. This impact has reduced as the multiplier reduces.
- While the system is set up to recoup the cost of the scheme from the market, and document the cost to the market, it does not calculate and document the economic benefits – primarily reduced wholesale electricity prices through perceived reduced demand.
- When considering the cost of SRES (or LRET) the real impact of the Merit Order Effect should be calculated and offset against the cost to produce a net cost/benefit.

There have been two key economic inefficiencies in the SRES scheme that have unnecessarily contributed to the cost of the benefits:

1. The lack of coordination between different schemes across the States and territories and the lack of coordination between State and Australian objectives. This resulted in rapid boom/bust cycles in the industry; an over subsidy of solar systems in some cases; and inappropriately sized systems aimed at making money rather than reducing emissions and offsetting electricity charges.

   This is no longer an issue as over valued State and Territory schemes are no longer politically favoured.

2. The anomaly that has enables electricity retailers to charge $40 for STCs when passing through the "cost" of the scheme while at the same time purchasing these for much less than $40 (sometimes less than $20) and complaining about the cost

of the scheme. While some Governments have moved to stop this, broader action needs to be taken.

The cost of SRES has peaked and is rapidly declining while the benefits it provides continue to increase. The SRES is now the best value contributor towards meeting the RET.

More than 2 million Australians now live under a roof that generates solar power. They have been involved in a decision to install solar power and engaged in considering the economics and environmental implications of the energy they consume.

The benefit to the community and economy that this brings should be expanded and individual citizens looking for ways to actively participate in the RET and its outcomes should not be discouraged or disenfranchised by negative changes to the SRES, which would favour the "big end of town" over individual citizens.

Q: Should there continue to be a separate scheme for small-scale technologies?

A: Yes, it is the only practical way to move forwards because:

- The drivers behind the investment in small scale and the investment in large scale systems are so different that a single scheme will not be effective.
- While decreasing system costs and increasing electricity costs means the level of support required to enable economic deployment of small systems to continue is also decreasing – and at some point will reach zero, access to the ability to generate electricity (and to generate clean energy) has become a significant social issue that cannot be ignored.
- While there are costs, as acknowledged previously, there are also significant benefits to the whole community and these could be maximised.
- Removing the stand alone SRES would effectively erode the target for large scale systems and cause the negative effects associated with reducing the 41,000GWh LRET target – reduced confidence, reduced investment and higher long term costs to the economy.
- While the costs of SRES has peaked (due to reduced multipliers and state based incentives), its value to the economy hasn't. Negatively effecting the SRES now would reduce the ability to access the benefits for minimum cost and reduce the stability of the sector.

Small-scale target

Q: Is the uncapped nature of the SRES appropriate?

A: The SRES has a natural cap by way of a limited total market size.

Introducing a cap would also introduce significant challenges. Getting the cap right – to meet the combination of economic, technical and social pressures is unlikely to be achieved, is likely to cause the need for challenging revisions over time and further boom/bust cycles.

A steady as you go approach at this time (sticking with the status quo) will see a natural approach to market saturation and provide consumers and the industry with a known and manageable environment.

Q: What do you see as being the costs and benefits of an uncapped scheme in terms of economic efficiency, environmental effectiveness and equity?

A: Operation of the SRES in its current form has lead to:

- Lower wholesale energy prices
- Less pressure on networks and generators at some of the key peak load periods and at a time when raising capital for electricity generation is challenging for traditional generation systems.
- An enormous change in consumer attitude to electricity and energy efficiency – consumers are more aware of how much energy they use, how to reduce their usage and the economic and environmental benefits of reduced energy consumption.

Q: Is the SRES driving investment in small scale renewable technologies? Is it driving investment in skills?

A: The SRES has clearly driven investment in small systems – approximately $8B has been invested in distributed renewable generation and hot water heating. This investment has lead to:

A significant national skill base has been created across the country, as a direct result of the creation of a true market. This skill base could be further leveraged by removing barriers to medium and large scale solar generation (i.e. by enabling the establishment of a medium and large scale solar market rather than focusing on a few specific projects).

Deeming

Q: Is deeming an appropriate way of providing certificates to SRES participants?

A: Deeming is economically inefficient:

- Deeming rewards poor quality outcomes over high quality outcomes because it rewards theoretical generation rather than actual generation. As a result, sub standard systems (due to poor product or poor installation) that produce less output but are cheaper, receive the same level of support as systems that are of a high standard and produce more output (but are typically more expensive).
- Reduces the pressure on system providers and system owners to maximise the output of systems – thereby reducing the economic value of the system.
- Brings the cost of the abatement achieved by the system (actually the estimated or nominal abatement) forward to day1 on the systems operation. This distorts the cost of this abatement.

While deeming is not perfect, it seems that moving to a generation based approach would require a level of coordination and cooperation from retailers and (in most cases) Network Operators and their “smart meters” that would be difficult to achieve at a small scale level.

Q: Are the deeming calculations for different small-scale technology systems reasonable?

A: The current calculations have proved to be a rational approximation of a 15 year period – assuming one accepts that deeming is the only practical approach for small scale systems.

Solar Credits

Q: What are the lessons learned from the use of multipliers in the RET? Is there a role for multipliers in the future?

A: The key lesson we can learn from the implementation of the multipliers is to be cautious with the way they are managed. Minimum change; maximum transparency of any revision process; and maximum notice of any changes are key ingredients for effective implementation.

The approach to use multipliers with a clearly expressed plan for their reduction to ensure pressure is exerted on the market to improve and reduce costs, and to ensure the market (industry and consumers) are not over rewarded is a sound one. It can easily be used to create a more balanced portfolio, to create capability and capacity and accelerate the maturity of other emerging technologies.

The STC Clearing House

Q: Is the STC Clearing House an effective and efficient mechanism to support the operation of the SRES?

A: The Clearing house has hardly participated in the STC market and as such has not been effective to date, however it does play a role in providing comfort that at some time in the future it will provide liquidity at a known price for those that can afford to, or see sufficient value in, waiting.

The positioning of the Clearing House by the Government has added to confusion by setting consumer expectations that the value of STCs was $40 rather than the market price – its role could be better explained.

Q: Should changes be made to the Clearing House arrangements? If so, what would be the costs and benefits of any suggested alternative approaches?

A: There is no material reason to change the Clearing House or its role at this time.

Q: Is $40 an appropriate cap for small-scale certificates given the recent fall in cost of some small- scale technologies, particularly solar PV?

A: The cap is just that and in reality has (almost) only been used by retailers to justify their pass through pricing of STCs, creating a windfall profit. Changing the cap would have no material upside benefit but risks a significant destabilisation of the market.

Rather than considering a change in the cap, a more effective action would be to ensure that electricity retailers can only pass through the cost they pay for STCs rather than take a wind fall profit from them.

Small-scale administration

Q: Are the SRES administration arrangements appropriate and working efficiently?

A: The Act creates a legislated monopoly for the accreditation of small-scale renewable energy technologies, ensuring that only one non-government agency has been given that power. This is counter productive and has resulted in the potential for conflicts of interest between quality and safety on the one hand and commercial pragmatism/benefit on the other. We believe that the Act should be amended to either break the monopoly or to bring the accreditation under the role of the Regulator.

There are issues around accreditation (of people, companies and products) and training quality. Our understanding is that the Regulator is working on these areas and we support the following:

- Ensuring that certification of individuals is based on tested knowledge and skills rather than registration and/or attendance at training sessions
- Ensuring that training organisations are delivering quality training that meets the objectives and requirements of the scheme.
- Ensuring (to the maximum practical extent) the quality of accredited products. This is not currently the case as product suppliers are not required to meet ISO quality standards in order for their products to be accredited.
- Rigorously ensuring that companies operating in the sector are held to account for the quality of the systems they sell and provide to consumers.

Issues in relation to the Clearing House are described previously.

Diversity of Renewable Energy Access

Q: Should the RET design be changed to promote greater diversity, or do you think that, to the extent that there are barriers to the uptake of other types of renewable energy, these are more cost- effectively addressed through other means?

A: In the near term, devices external to the RET can be used to promote a greater diversity:

- ARENA and the CEFC can play a direct role in overcoming transitional economic barriers for technologies like solar and to accelerate the R&D and commercialisation of emerging technologies.
- The other inhibitors to diversity relate to the need for market and network infrastructure reforms including:
    - Providing embedded and distributed generators with access to a more fair portion of the value they provide to the market
    - Revising the incentives for network infrastructure assets to encourage a change towards supporting 21st century energy generation and consumption

REVIEW FREQUENCY

Q: What is the appropriate frequency for reviews of the RET?

A: Stability of market conditions are key to establishing a least cost sustainable market that operates at the pace required to meet the targets and revisions should be kept to a minimum.

Q: What should future reviews focus on?

A: The next review should:

- Start with the question “Is the RET going to meet the objectives?” and, in terms of the current pre 2020 phase only address those obstacles to success.
- Look at the post 2020 environment and how we best transition from the current RET to that next phase.

About the Solar Business Council Inc.

The Solar Business Council (the Business Council) is the incorporated body formed by the members of the Australian Solar Round Table (the Round Table) – it effectively replaces the Round Table.

The Solar Business Council is a group of Senior Executives of Australia's largest and most commercial Solar Energy Companies and has been formed to provide industry leadership, stakeholder education and to earn market confidence for the Residential and Commercial Solar market in Australia. The Round Table was formed in August 2011 and incorporated into the Business Council in April 2012. Its membership will continue to expand as likeminded CEOs are invited to join.

Currently, the Round Table membership is:

- Jeremy Rich, CEO, Energy Matters
- Simon Schauble, CEO, Nu Energy
- Jenny Lu, CEO, Suntech Power Australia
- Steve McRae, CEO, Ingenero
- Richard Turner, CEO, ZEN Energy Systems
- Phillip Butterworth, Country Manager, Power One

The Business Council uses objective, fact-based data to develop and communicate industry strategies and policies that are empathic to the needs of the stakeholders in the industry, Governments and the broader community. Members contribute their resources and experience to establish critical mass and a strong voice.

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